



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,173	11/14/2003	Daniel Underkofler	2003-051-TAP	2922

7590 08/31/2006

Timothy R. Schulte
Storage Technology Corporation
One StorageTek Drive
Louisville, CO 80028-4309

EXAMINER

RIVERA, WILLIAM ARAUZ

ART UNIT	PAPER NUMBER
----------	--------------

3654

DATE MAILED: 08/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/714,173	Applicant(s) UNDERKOFER ET AL.	
	Examiner William A. Rivera	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/14/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “*storage device*” as set forth in Claim 1, line 1; “*single read/write head disposed along said axis*” as set forth in Claim 4, line 3; *a plurality of “flanged” rollers/guides* as set forth in Claim 5, lines 3 and Claim 12, line 5 (note that while rollers are shown, none of the details of the rollers are shown); “*said plurality of flanged rollers being grooved*” as set forth in Claim 8, line 3; “*a non-flanged post guide*” as set forth in Claim 9, line 3 and Claim 12, line 7 (note that while rollers are shown, none of the details of the rollers are shown); “*post guide being non-spinning*” as set forth in Claim 10, line 3 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be

Art Unit: 3654

notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

Claims 3, 4, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3 and 4 are inaccurate and/or misdescriptive. It is unclear as to how a single or a pair of read/write heads can be included in a storage device?

Claim 14 is vague and indefinite. On lines 3-5, the phrase “said first pair of flanged guides being adjacent; said second pair of flanged guides being adjacent” is unclear. What are the first pair of flanged guides adjacent to? What are the second pair of flanged guides adjacent to?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Saitou (U.S. Patent No. 4,367,854) or Hoover et al (U.S. Patent No. 4,443,827).

With respect to Claims 1-2 and 4, Saitou, Figures 1-4, teaches a tape guide mechanism in a storage device for defining a tape path comprising: a cartridge reel for supplying tape to a take-up reel 115b; said cartridge reel being generally bisected by a longitudinal axis of said tape path;

Art Unit: 3654

and said tape path being generally symmetrically disposed about said axis; said tape path being generally U-shaped; a single read/write head disposed along said axis.

Claims 1-3, 5-7, 9-15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Maxey (U.S. Patent No. 4,275,424).

With respect to Claims 1-3, 5-7, 9-15, and 17, Maxey, Figures 1-9, teaches a tape guide mechanism in a storage device for defining a tape path comprising: a cartridge reel for supplying tape to a take-up reel 115b; said cartridge reel being generally bisected by a longitudinal axis of said tape path; and said tape path being generally symmetrically disposed about said axis; said tape path being generally U-shaped; a pair of read/write heads 180,182 disposed symmetrically about said axis for reading data from and writing data to said tape; a plurality of flanged rollers 128b,130b disposed symmetrically about said axis, said plurality of flanged rollers being remotely located away from said cartridge and take-up reels; said plurality of flanged rollers including a first pair of flanged rollers located proximate to a first read/write head and a second pair of flanged rollers located proximate to a second read/write head; said first pair of flanged rollers being adjacent to each other; and said second pair of flanged rollers being adjacent to each other; a non-flanged post guide 128b being located proximate to said take-up reel; said post guide being non-spinning; said tape path including a first portion that is generally parallel to said axis, a second portion that is generally perpendicular to said axis, and a third portion that is generally parallel to said axis.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3654

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maxey as applied to claims 1-3, 5-7, 9-15, and 17 above, and further in view of Saitou (U.S. Patent No. 4,367,854) or Hoover et al (U.S. Patent No. 4,443,827).

With respect to Claim 4, Maxey teaches all the elements of the mechanism except for the use of a single read/write head. However, Saitou or Hoover et al, teaches the use of a single read/write head along the axis. It would have been obvious to one of ordinary skill in the art to use one single read/write head, as taught by Saitou, for the purpose of minimizing the wear on the tape.

Claims 8, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maxey as applied to claims 1-3, 5-7, 9-15, and 17 above, and further in view of Poorman (U.S. Patent Application Publication No. 2003/0087738).

With respect to Claims 8, 16, and 18, Maxey is advanced above. Maxey teaches all the elements of the guide mechanism except for the grooves on the roller. However, Poorman, Figures 4 and 5, teaches a tape guide having grooves. It would have been obvious to one of ordinary skill in the art to provide grooves to guides of Maxey, as taught by Poorman, for the purpose of allowing air to bleed from between the surface of the hub and the tape.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

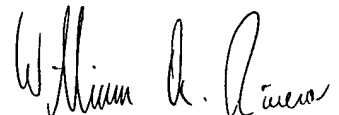
Art Unit: 3654

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William A. Rivera whose telephone number is 571-272-6953.

The examiner can normally be reached on Monday to Thursday - 5:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on 571-272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**WILLIAM A. RIVERA
PRIMARY EXAMINER**

August 30, 2006